

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 218	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/KR2004/001086	International filing date (day/month/year) 11 MAY 2004 (11.05.2004)	(Earliest) Priority Date (day/month/year) 06 DECEMBER 2003 (06.12.2003)	
Applicant KOREA RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY et al			

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

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1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 C08G 61/00, C12P 1/00**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C08G 61/00, C12P 1/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Patents and applications inventions for 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CA-on CD, PAJ, KIPASS**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,900,671 A (MEAD CORP) 13 February 1990 see the whole documents	1-8
A	US 5,824,414 A (MITSUI CHEMICALS, INC. SHIRO KOBAYASHI) 20 October 1998 see the whole documents	1-8
A	JP 2002-201245 A(LIGNYTE CO LTD) 19 July 2002 see the whole documents	1-8
A	US 5,322,960 A (NIPPON CATALYTIC CHEM IND) 21 June 1994 see the whole documents	1-8
A	US 6,362,315 B2 (THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE ARMY) 26 March 2002 see the whole documents	1-8
A	JP 11-269254 A (GUN EI CHEM IND CO LTD) 05 October 1999 see the whole documents	1-8

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

08 SEPTEMBER 2004 (08.09.2004)

Date of mailing of the international search report

09 SEPTEMBER 2004 (09.09.2004)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2004/001086

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US490067 1A	13.02.1990	US490067 1A	13.02.1990
US 58244 14A	20.10.1998	EP73992 1A2	30.10.1996
		EP73992 1A3	20.11.1996
		KR22084 1B1	01.10.1999
		JP90 127 10A2	14.01.1997
JP 2002-201245 A 19 July 2002		None	
US5322960A	21.06.1994	DE6940580 1D1	30.10.1997
		DE6940580 1T2	29.01.1998
		EP0620206A1	19.10.1994
		KR97 10462B1	26.06.1997
		US5322960A	21.06.1994
US 6362315 B2	26.03.2002	US2001002417AA	31.05.2001
		US 6362315 BA	26.03.2002
JP 11-269254 A	05.10.1999	None	

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